

(12) **United States Patent**  
**Petty et al.**

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(54) **EXTENDABLE ROPE PROTECTING SLEEVE**

(56) **References Cited**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

(65) **Prior Publication Data**

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An extendable rope protecting sleeve is provided as an apparatus that extends over an existing climbing rope providing a barrier that protects said climbing rope from fraying and weakening as a result of direct contact with damaging surfaces. The expandable rope protecting sleeve shrouds a climbing rope during a climber's descent with minimal interference to the climber's range of motion. The apparatus provides the extendable sleeve with a detachable engagement through a breakaway wrist strap in order reduce the likelihood of the climber being encumbered by the apparatus. Additionally, the detachable engagement is provided in a manner that avoids a sudden jerking sensation upon detachment. Through the combination of the aforementioned components the apparatus is able to slowly expand over a climbing rope covering exposed sections of the climbing rope during the climber's descent.

**Related U.S. Application Data**

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**F16L 57/00** (2006.01)

(52) **U.S. Cl.**  
USPC ..... **138/110**; 138/108; 138/107; 254/389

(58) **Field of Classification Search**  
USPC ..... 138/110, 118, 106–108, 109, 178; 254/389

See application file for complete search history.

**14 Claims, 7 Drawing Sheets**

